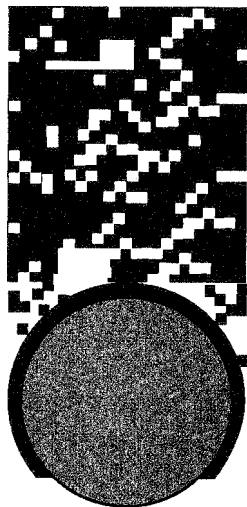


Strategic Regional Arterial

**Orchard/Randall/Illinois 31
from U.S. Route 30 to
the Wisconsin State Line
(Vol. I)**



**Operation
GreenLight**

**Illinois Department of Transportation
April, 1998**

FOREWORD

Orchard Road/Randall Road/Illinois Route 31 (SRA) includes Orchard Road from U.S. Route 30 to Oak Street Road, Randall Road from Mooseheart Road to McHenry Avenue, Illinois Route 31 from about Three Oaks Road to U.S. Route 12, and U.S. Route 12 from Illinois Route 31 to the Wisconsin State Line. This Strategic Regional Arterial (SRA) report for Orchard Road/Randall Road/Illinois Route 31 has been prepared for the Illinois Department of Transportation and the Strategic Regional Arterial Subcommittee of the Work Program Committee of the Chicago Area Transportation Study by Harland Bartholomew & Associates, Inc.

As an SRA route, Orchard Road/Randall Road/Illinois Route 31 is intended to function as part of a regional arterial system, carrying high volumes of long-distance traffic in conjunction with other SRA routes and the regional expressway and transit systems. This report is one element of a long-range plan for all routes in the SRA network. Together, the route studies constitute a comprehensive, coordinated plan for the entire SRA network.

Volume I of this report includes a description of the SRA study objectives and process, a detailed exposition and analysis of the existing route conditions, recommendations for ultimate and low-cost improvements, and exhibits of existing facility, environmental and developmental characteristics, recommended improvements and details. Volume II consists of documentation of the public involvement process including citizen comments.

SUMMARY OF RECOMMENDATIONS

The SRA Route Orchard Road/Randall Road/Illinois Route 31 is divided into thirteen route segments. (See Figure *i.i* and *i.ii*.) Recommendations are made for each route segment, and a summary of the major recommendations is presented below.

SRA Segment 1: Orchard Road from U.S. Route 30 to Oak Street Road

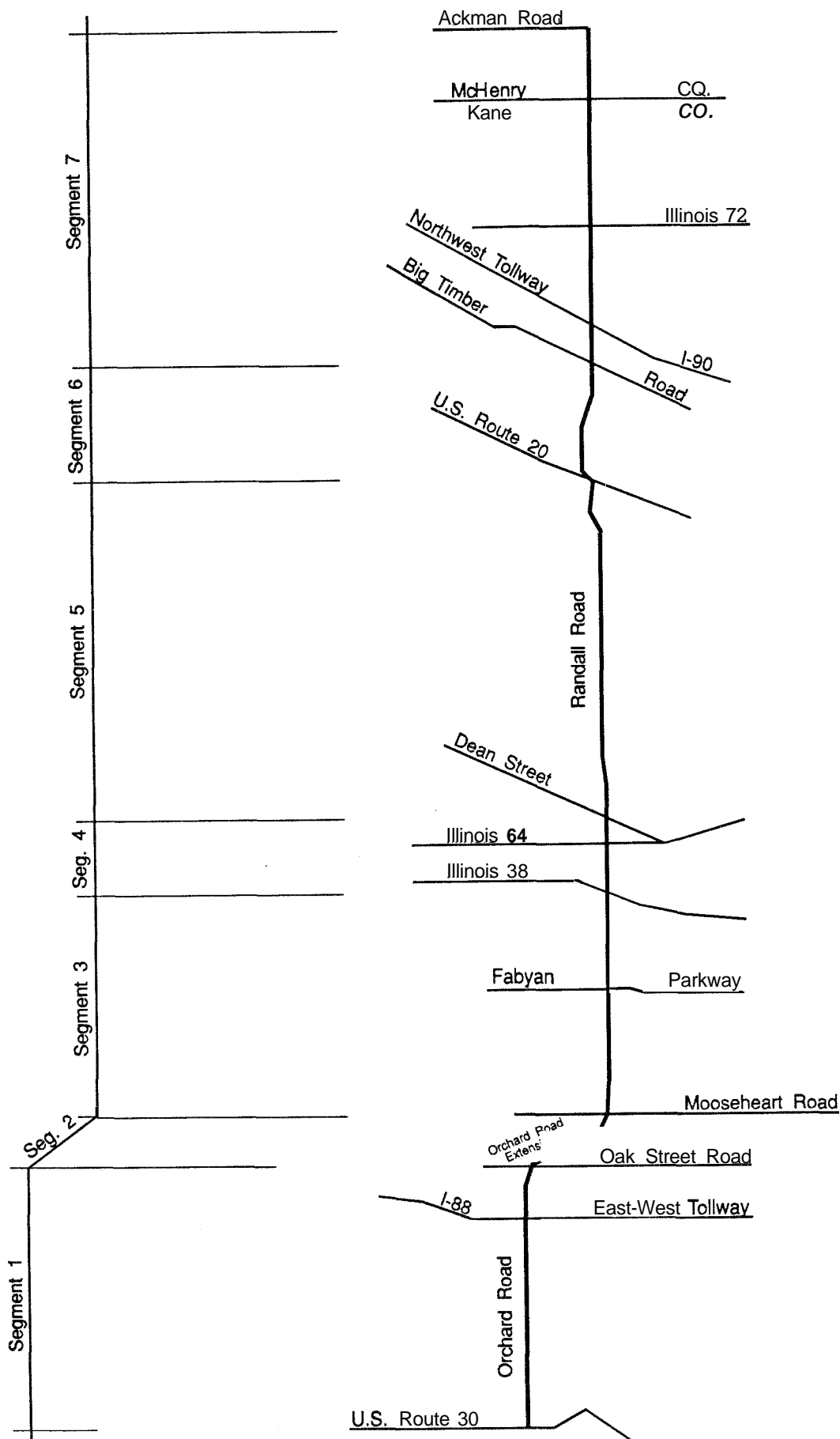
- U.S. Route 30 to Jericho Road, two through lanes in each direction with a 30-foot wide median within a desirable ultimate right-of-way 120 feet wide
- Jericho Road to New Indian Trail, two through lanes in each direction and a 30-foot wide median within the existing right-of-way
- New Indian Trail to Interstate 88 (East-West Tollway), three through lanes in each direction separated by a 30-foot wide median within the existing right-of-way
- Interstate 88 to Oak Street Road, three through lanes in each direction and a 30-foot wide median within a desirable ultimate right-of-way width of 150 feet
- Interconnected signal systems from U.S. Route 30 to Aucutt Road and from Jericho Road to the end of the segment
- Grade separations at the Burlington Northern Railroad and the Virgil Gilman Nature Trail
- Modify Interstate 88 interchange to provide full directional movements

SRA Segment 2: Orchard Road Extension from Oak Street Road to Randall Road

- Three through lanes in each direction and a 30-foot wide median within a desirable ultimate right-of-way width of 150 feet
- An interconnected signal system for all of the signals in the segment

SRA Segment 3: Randall Road from Orchard Road Extension to Illinois Route 38

- Orchard Road Extension to the Chicago and Northwestern Railroad, three through lanes in each direction with a 30-foot wide median within a desirable ultimate right-of-way 150 feet wide
- Chicago & Northwestern Railroad to Williamsburg Lane, three through lanes in each direction and a 30-foot wide median within the existing right-of-way

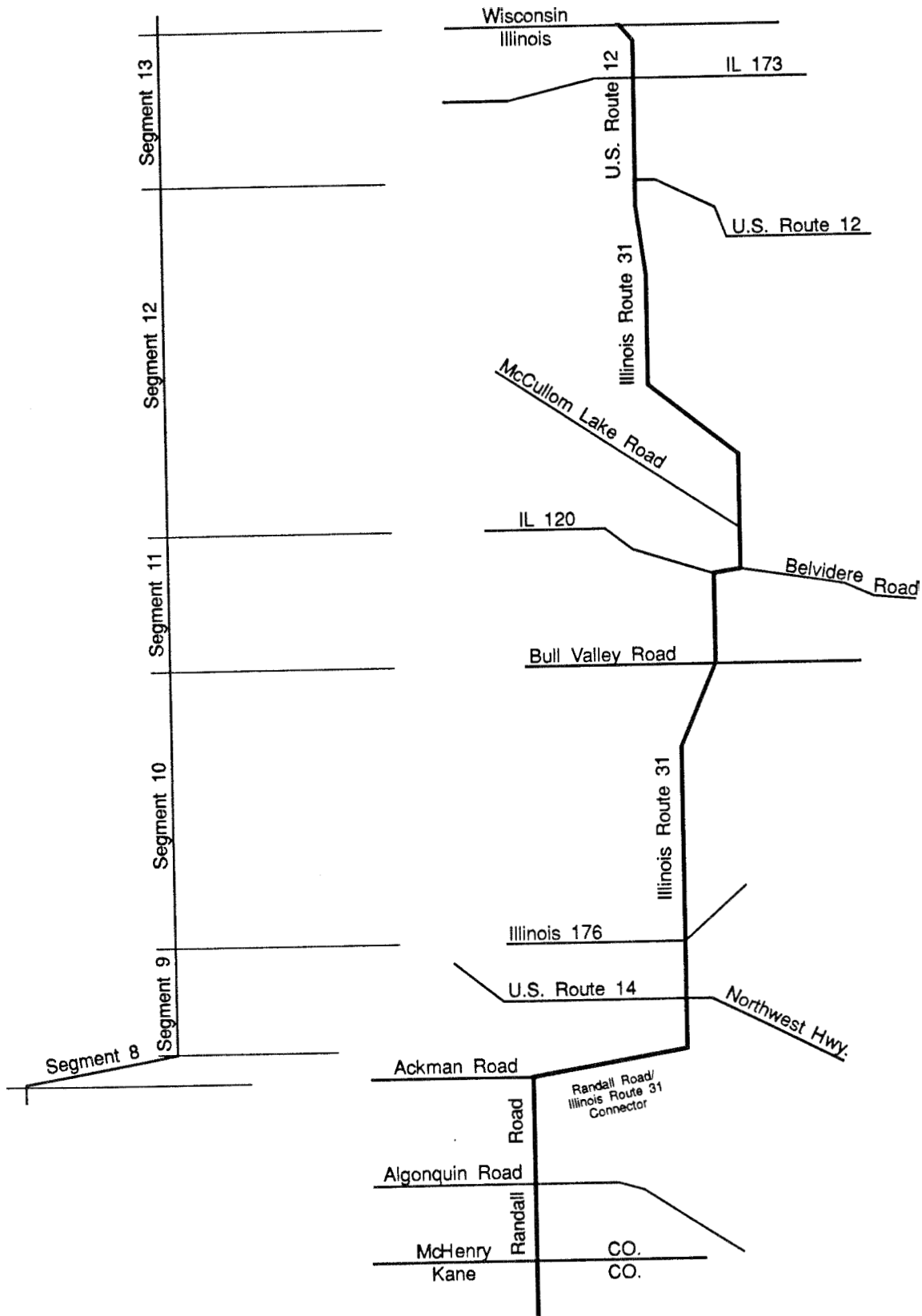


Orchard Road/Randall Road/ Illinois Route 31 (Kane)

prepared by Harland Bartholomew & Associates, Inc.

Segment Location Map

Figure I.I



Orchard Road/Randall Road/ Illinois Route 31 (McHenry)

prepared by Harland Bartholomew & Associates, Inc.

Segment Location Map

Figure i.ii

SUMMARY OF RECOMMENDATIONS_(cont.)

- Williamsburg Lane to Illinois Route 38, three through lanes in each direction and a 30-foot wide median within a desirable ultimate right-of-way 150 feet wide
- An interconnected signal system from Main Street in Batavia to Segment 4

SRA Segment 4: Randall Road from Illinois Route 38 to Dean Street

- Three through lanes in each direction with a 30-foot wide median within a 150-foot wide desirable ultimate right-of-way
- An interconnected signal system for the entire segment

SRA Segment 5: Randall Road from Dean Street to U.S. Route 20

- Three through lanes in each direction with a 30-foot wide median within a desirable ultimate right-of-way 150 feet wide
- Interconnected signal system from Segment 4 to Red Haw Lane; from Red Gate Road to Bolcum Road, from Bowes Road to Cottage Green Drive, and from South Street to Segment 6

SRA Segment 6: Randall Road from U.S. Route 20 to Big Timber Road

- Three through lanes in each direction separated by a 30-foot wide median within a desirable ultimate right-of-way 150 feet wide
- An interconnected signal system from South Street in Segment 5 to Royal Boulevard

SRA Segment 7: Randall Road from Big Timber Road to Randall Road/Illinois Route 31 Connector

- Big Timber Road to Illinois Route 72 (Higgins Road), three through lanes in each direction separated by a 30-foot wide median within a 150 foot wide desirable ultimate right-of-way
- Illinois Route 72 to Algonquin Road, two through lanes in each direction and a 30-foot wide median within a desirable ultimate right-of-way 150 feet wide
- Algonquin Road to Randall Road/Illinois 31 Connector, two through lanes in each direction with a 30-foot wide median within the existing right-of-way
- interconnected signal systems from Big Timber Road to Miller Road and from Ackman Road to McHenry Avenue
- Modification of the Interstate 90 (Northwest Tollway) interchange to provide fully directional access

SRA Segment 8: Randall Road/Illinois Route 31 Connector from Randall Road to Illinois Route 31

- Randall Road to Pyott Road, two through lanes in each direction and a 30-foot wide median within the existing right-of-way
- Pyott Road to Illinois Route 31, two through lanes in each direction and a 30-foot wide median within a 120 foot wide desirable ultimate right-of-way
- Interconnected signal system from Pyott Road to Virginia Road and from Pingree Road to Three Oaks Road in Segment 9

SUMMARY OF RECOMMENDATIONS *(cont.)*

SRA Segment 9: Illinois Route 31 from Randall Road/Illinois Route 31 Connector to Illinois Route 176

- Two through lanes in each direction and a 30-foot wide median within existing right-of-way
- Interconnected signal systems from Segment 8 to Three Oaks Road and from Crystal Lake Avenue to Segment 10
- Modification of U.S. Route 14 interchange under ongoing IDOT Phase I Study
- Realign the east leg of Illinois Route 176 to intersect Illinois Route 31 at 90 degrees

SRA Segment 10: Illinois Route 31 from Illinois Route 176 to Bull Valley Road

- Illinois Route 176 to Gracy Road, two through lanes in each direction and a 30-foot wide median within a 120-foot wide desirable ultimate right-of-way
- Gracy Road to Bull Valley Road, two through lanes in each direction and a 46-foot wide median within a 170-foot wide desirable ultimate right-of-way in the West McHenry Bypass Corridor
- Interconnected signal systems from Segment 9 to mid-mile collector and from Edgewood Road to Gracy Road
- Realign Ames Road to intersect Illinois Route 31 opposite Edgewood Road

SRA Segment 11: Illinois Route 31 from Bull Valley Road to McCullom Lake Road

- Two through lanes in each direction separated by a 46-foot wide median within a 170-foot wide desirable ultimate right-of-way in the West McHenry Bypass Corridor
- SRA designation follows West McHenry Bypass alignment within identified bypass corridor

SRA Segment 12: Illinois Route 31 from McCullom Lake Road to U.S. Route 12 (Tryon Grove Road)

- McCullom Lake Road to School Road, two through lanes in each direction and a 46-foot wide median within a 170-foot wide desirable ultimate right-of-way in the West McHenry Bypass Corridor
- School Road to U.S. Route 12, two through lanes in each direction and a 46-foot wide median within a 170-foot wide desirable ultimate right-of-way

SRA Segment 13: U.S. Route 12 from Illinois Route 31 to the Wisconsin State Line

- Route recommendations deferred pending ongoing IDOT study results